Company:	Regeneron Pharmaceuticals	Ticker:	REGN	Current Price: $ 344.50	Sector:	Healthcare	Industry:	Biotechnology
Target Price:	$ 488.07	P/E:	45.87		Beta:	1.15	Market Cap:	$ 36,310
Stop Loss:	$ 292.83	Forward P/E:	31.52		Credit Rating:	N/A	Avg Vol:	105.4
52 Week High / Low:	$452.96/$325.35	TTM EPS:	$6.95		Rating Outlook:	N/A	Dividend Yield:	N/A

Company Background:

Regeneron Pharmaceuticals discovers, develops, and commercializes products that fight eye disease, cardiovascular disease, cancer, and inflammation. The company has four marketed products: Eylea, approved for wet age-related macular degeneration (AMD) and other eye diseases; Praluent forLDL cholesterol lowering; Zaltrap in colorectal cancer; and Arcalyst in CAPS (cryopyrin-associated periodic syndromes). Regeneron is also developing monoclonal antibodies with Sanofi in rheumatoid arthritis, atopic dermatitis, asthma, and cancer.

Industry Outlook:

The global pharmaceuticals market increased 6% to $1.1 trillion in 2015, up from $1.0 trillion in 2014, with nearly 40% of the growth coming from specialty drugs, including oncology, autoimmune, respiratory, and anti-viral drugs. S&P projects pharmaceutical sales will reach $1.4 trillion by 2020. The pharmaceuticals industry's stock performance has been aided by several factors, including expanding global presence (together with expanding access to health care in many emerging markets), positive demographics such as an expanding elderly population, benefits from the health care reform law, and a healthy M&A environment. This has resulted in increased global sales. Branded and specialty drugs will likely drive spending growth in the developed markets, while an overall increase in the use of pharmaceuticals will likely spur growth in emerging markets.The CAGR for global sales from 2016 to 2020 is forecast to range from 4% to 7%, with the US forecasted to grow 5%–8%. The sector also benefit by new administration's attitude toward drug price.

Investment Thesis:

Foundamental: (1) *Product:* REGN's blockbuster drug, Eylea, has a 60% market share of wet AMD market. Its strong competitiveness is due to its more attractive dosing regimen versus Lucentis/Avastin in ophthalmology indications. REGN has extended use of Eylea to other eye-related diseases; (2) *Product:* Praluent is positioned strongly in the LDL cholesterol lowering market, which has mega-blockbuster potential given the millions of patients still above LDL targets despite widespread statin use.(3) *Srong Pipeline:* 11 candidates in phase 3. Sarilumab, for rheumatoid arthritis, and Dupixent, for children's atopic dermatitis are likely to make commericla success. (4) *Technology barrier:* all of REGN's marketed and pipeline products are biologics, which provide a defense from generic competition due to the complexity and cost of manufacturing biosimilars;(5) Partnerships with Bayer and Sanofi in R&D and overseas distribution; (6) *Target of M&A:* potential buyer: Sanofi, Gilead, Pfizer, and Novartis.
Financial: Research and development and selling costs to grow at a fast clip as Regeneron's pipeline matures and begins to hit the market (R&D expense: 39% to revenue in 2015).

Investment Risks:

(1) Eylea is competing with Roche and Novartis in the ophthalmology market, and both Avastin and Lucentis are entrenched in the key market segments.
(2) Praluent has entered the multibillion-dollar cholesterol-lowering market, it faces stiff competition from Amgen's Repatha. In January 2017 a federal judge ruled Praluent infringed on the patent rival Amgen's Repatha. REGN and Sanofi will negotiate a potential settlement where Amgen receives royalties.

Discounted Cash Flow Analysis

(million USD)	2017	2018	2019	2020
Free Cash Flow	$ 1,081.59	$ 1,395.99	$ 1,801.77	$ 2,325.51
Terminal Value				$ 77,024.31
Total Flows	$ 1,081.59	$ 1,395.99	$ 1,801.77	$ 79,349.82
PV of Flows	$ 1,081.59	$ 1,395.99	$ 1,801.77	$ 79,349.82
Enterprise Value	$ 83,629.17			
Outstanding Debt	$ 32,187.00			
Equity Value	$ 51,442.17			
Outsatnding Shares (mn)	105			
Equity Value per share	$ 488.07			

Past Performance

Competitors REGN More...

Name	Price	% Chg	TTM Sales $ mil
Regeneron Pharmaceuticals Inc	**$343.36**	**-0.91** ↓	**4,732**
Roche Holding AG ADR	$29.27	-1.38 ↓	51,936
Roche Holding AG Dividend Right Cert.	$235.12	0.18 ↑	51,936
Roche Holding AG	$238.25	1.79 ↑	51,936
Gilead Sciences Inc	$71.16	-0.14 ↓	31,576
Amgen Inc	$154.43	-1.74 ↓	22,562

Financial Performance

($millions)	2012	2013	2014	2015	FY2016 Est.	FY2017 Est.
Revenue	$ 1,378.5	$ 2,104.7	$ 2,819.6	$ 4,103.7	$ 5,000.0	$ 5,900.0
EBIT	$ 457.7	$ 760.0	$ 823.9	$ 1,251.9	$ 1,965.6	$ 2,453.5
EBITDA	$ 494.7	$ 801.2	$ 876.6	$ 1,326.8	$ 2,058.0	$ 2,514.0
Net Income	$ 416.2	$ 425.6	$ 488.0	$ 648.3	$ 800.0	$ 1,080.0
Revenue Growth %	209.2%	52.7%	34.0%	45.5%	21.8%	18.0%
EBITDA Margin %	35.9%	38.1%	31.1%	32.3%	41.2%	42.6%
Operating Margin %	35.9%	38.1%	31.6%	32.3%	40.5%	45.5%
Net Income Margin	30.1%	20.2%	12.0%	15.5%	16.0%	18.3%
Total Debt/Equity	0.67	0.51	0.52	0.53	0.52	
EPS	$3.86	$3.81	$3.07	$5.52	$6.95	$11.56
PE Ratio	44.38	72.03	95.38	96.49	29.96	24.34
Current Ratio	7.37	6.01	3.31	3.59	3.64	
ROE	86.7%	26.5%	15.0%	20.5%	20.5%	
ROA	44.1%	16.9%	9.9%	13.4%	12.6%	
Dividend Per share	NA	NA	NA	NA	NA	
FCF	$ (123.95)	$427.33	$419.43	$652.85	$ 838.00	

Discounted Cash Flow

	2012-2016	2017-2020
Avg Revenue growth	29.39%	19.90%
Avg EBITDA margin	36.07%	36.07%
Avg Net Income growth	13.96%	29.07%
Cost of Debt		3.92%
Tax Rate		40.0%
Cost of Equity		9.26%
WACC		6.90%
Perpetuity growth rate		3.00%

Analyst Opinion:

Buy: 15	Hold: 12	Sell:0
	Rating	Target
Morning Star		$500
S&P Net Advantage	Buy	$460
Value Line	Timeliness:4	$480~$720

Relative Valuation

	REGN	Amgen	Gilead	Roche	Industry Avg.
P / E (2016)	96.49	17.73	8.49	20.69	309.76
Forward P / E (2017)	31.52	12.84	6.82	13.93	40.34
EV/EBITDA	32.05	10.48	4.77	9.5	27.37
Dividend Yield	NA	2.27%	2.28%	N/A	0.01%
PEG Ratio	1.47	1.8	5.65	1.96	1.99
TTM EPS	$7.51	$10.15	$11.44	$13.99	-$1.08
Revn Grth	45.5%	8.0%	31.1%	5.1%	262.57%
EBITDA Grth (YoY)	51.36%	27.7%	42.8%	3.4%	-43.69%
Operating Margin	40.5%	40.1%	33.5%	68.0%	-90.6%
Debt / Equity	0.52	1.12	1.16	0.85	0.37
Market Cap	$ 36,310.3	$118,780.0	$ 95,940.0	$206,730.0	$ 6,960.0
Revenue (TTM)	$ 4,730.0	$ 22,560.0	$ 31,580.0	$ 51,360.0	$ 779.9
EBITDA (TTM)	$ 1,310.0	$ 11,600.0	$ 21,090.0	$ 22,870.0	$ 186.8
Price / Cash Flow	27.64	13.56	7.29	13.98	43.26

Total Return

	REGN	Biotechnology	S&P 500
YTD	-32.38%	-20.39%	1.18%
1 Year	-32.38%	-20.39%	9.53%
Last 3 Years	10.07%	4.58%	6.59%
Last 5 Years	45.95%	19.50%	12.21%

	REGN	Industry
Governance Disclosure Score	51.79	48.39
ESG Disclosure:	16.53	13.30
Social Disclosure Score	19.30	13.64
Environmental Disclosure Score	N/A	24.81

Prepared by Pei-ju Lee (Feb 2, 2017) using Bloomberg, Value Line, S&P Net Advantage, Capital IQ, Thomson One Banker, Morning Star, Yahoo Finance